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Reply to

Attn of: HW-113

MEMORANDUM

SUBJECT: Review of Occidental Chemical Corporation's November

28, 1995 Work Plan Occidental/PRI Bank Investigation

FROM: Allison Hiltner

Catherine Massimino

U. S. EPA

TO: Alastair McGregor

Occidental Chemical Corporation

General Comment: The plan proposes to classify materials into one of three types: "anthropogenic materials", "debris", and "sediments". Occidental suggests that "debris" be considered uncontaminated and only anthropogenic materials and sediments be sampled. This approach is problematic. Neither EPA nor OCC have any information as to whether the debris is, in fact, uncontaminated. In addition, the federal and state Fish and Wildlife Services will have input on the remediation plan through the Shoreline Permit and, depending on the details of the remediation plan, perhaps the CWA 404 process, and they will almost certainly want removal of all debris and replacement with materials that will create a better habitat for marine organisms. Thus, unless OCC wants to agree up front that "debris" will be removed, it will have to be sampled.

Specific Comments:

Page 1 - In the first paragraph, suggest deleting "anthropogenic" from the first sentence and "if necessary" from the last sentence.

This section must be expanded to explain what will happen after the investigation is complete. It should state that if bank materials exceed the sediment quality objectives set forth in the CB/NT ROD, Occidental will develop a remediation plan for the banks.

Page 3 - Please provide additional information about the characterization and remediation of SMU C, which the document states is being undertaken by OCC as a separate voluntary activity. What work is being done and when? Is there characterization data available?

Page 4 - What does "possibly onto the PRI property" mean? The bank investigation should extend onto the PRI property.



Page 5, item 1 - See general comments regarding the classification of materials.

Page 5, item 2 - add PRI bank.

Page 6 - 100' apart is an extremely wide spacing, which could cause OCC to miss large areas of contamination. A 50' spacing would be more appropriate.

Be more specific about the process for installing and locating "supplementary boreholes".

It is not clear why no attempt is being made to delineate waste in the northern section of the bank. The discussion in Section 2.1 does not support such an approach. The northern portion of the bank should be handled in the same way as the central portion.

Page 8 - EPA has several concerns about the sampling approach, as noted below:

- ii) Is a PID the appropriate sampling device for the contaminants of concern? Although volatiles are a concern in groundwater, semivolatiles, metals and pesticides/PCBs have caused the largest problems in sediments. EPA and OCC should discuss this screening approach.
- iii) EPA does not agree with the idea of compositing across boreholes. At least one samples should be collected per borehole, selected based on field screening, visual inspection, or some other method. Also, indicate how many split spoons OCC anticipates will be needed per sample.

The date of the Hylebos Pre-Design QAPP is 6/17/94

Page 9 - Provide more details as to what will be provided in the deliverable. It should include detailed maps of sample locations, field logs, field notes, data QA/AC reports.

Page 10 - Add the PRI bank.

Page 11 - item ii) b), Delete "if any" from the second sentence.

Page 12 - See page 9 comments regarding the deliverable.

Page 13 - This schedule must be expanded to include more detail and all activities through remediation of the banks.

In the first paragraph, we should attempt to target a day with a lower than +2' MLLW tide if we can. The plan should suggest some specific days with low daylight tides so we can schedule this event. Some possibilities include 2/12 - +1.0' at 4:59, 2/22 - +1.9' at 1:31, 2/23 - +1.7' at 2:20 (these are Seattle tides so they're close, but not exactly right for Tacoma).

Page 16 - If compositing is done, samples should be composited in the field.

Page 17 - Suggest bringing a hammer and chisel, or some equivalent device, for bank samples, in case we want to sample (or get behind) some particularly hard debris.

Page 18 - What is the "on-site designated location" for field decontamination wastes?

Appendix A - EPA has not completed its review of the QAPP.

Appendix B - This HASP format is fine for OCC's internal purposes, but EPA would appreciate it if it could be replaced with a shorter "checklist" type of format for ease of review.

Appendix D - Were any chemical analyses done on any of these samples? If so, include the data.